



**Content on this page was developed during the 2009-2010 H1N1 pandemic and *has not been updated.***

- **The H1N1 virus that caused that pandemic is now a regular human flu virus and continues to circulate seasonally worldwide.**
- **The English language content on this website is being archived for *historic and reference purposes only.***
- **For current, updated information on seasonal flu, including information about H1N1, see the CDC Seasonal Flu website (<http://www.cdc.gov/flu/>).**

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## CDC Guidance for State and Local Public Health Officials and School Administrators for School (K-12) Responses to Influenza during the 2009-2010 School Year

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This document provides guidance to help decrease the spread of influenza (flu) among students and school staff during the 2009-2010 school year. This document expands upon earlier school guidance documents by providing a menu of tools that school and health officials can choose from based on conditions in their area. It recommends actions to take this school year and suggests strategies to use if CDC finds that the flu starts causing more severe disease. The guidance also provides a checklist for making decisions at the local level. Based on the severity of 2009 H1N1 flu-related illness thus far, this guidance also recommends that students and staff with flu-like illness remain home until 24 hours after resolution of fever without the use of fever-reducing medicines.

For the purpose of this guidance, “schools” will refer to both public and private institutions providing grades K-12 education to children and adolescents in group settings. The guidance applies to such schools in their entirety, even if they provide services for younger or older students. Guidance for child care settings and institutions of higher education are addressed in separate documents. This guidance represents CDC’s current thinking on this topic. It does not create or confer any rights for or on any person or operate to bind the public.

A more in depth explanation of the strategies and suggestions presented in this CDC Guidance may be found in the Technical Report on CDC Guidance for State and Local Public Health Officials and School Administrators for School (K-12) Responses to Influenza during the 2009–2010 School Year (<http://www.cdc.gov/h1n1flu/schools/technicalreport.htm>).

### BACKGROUND

The guidance is designed to decrease exposure to regular seasonal flu and 2009 H1N1 flu while limiting the disruption of day-to-day activities and the vital learning that goes on in schools. CDC will continue to monitor the situation and update the current guidance as more information is obtained on 2009 H1N1.

About 55 million students and 7 million staff attend the more than 130,000 public and private schools in the United States each day. By implementing these recommendations, schools and health officials can help protect one-fifth of the country's population from flu. Collaboration is essential: CDC, the U.S. Department of Education, state and local public health and education agencies, schools, students, staff, families, businesses, and communities all have active roles to play.

The decision to dismiss students should be made locally and balance the goal of reducing the number of people who become seriously sick or die from flu with the goal of minimizing social disruption and safety risks to children that are sometimes associated with school dismissal. Based on the experience and knowledge gained in jurisdictions that had large outbreaks in April through December 2009, the potential benefits of preemptively dismissing students from school are often outweighed by negative consequences, including students being left home alone, healthcare workers missing shifts when they must stay home with their children, students missing meals, and interruption of students' education. Education agencies and schools may dismiss students for reasons not related to public health goals, for example, when they are not able to maintain normal functioning because of very high student or staff absenteeism. Still, although the flu is unpredictable, more communities may be affected, reflecting wider transmission. The overall impact of 2009 H1N1 should be greater than during April through December 2009, and school dismissals may be warranted, depending on the disease burden and other conditions. (See the [Technical Report \(http://www.cdc.gov/h1n1flu/schools/technicalreport.htm?s\\_cid=cs\\_000\)](http://www.cdc.gov/h1n1flu/schools/technicalreport.htm?s_cid=cs_000) for discussion of the kinds of circumstances that might warrant school dismissals.)

The purpose of this document is to provide updated guidance for reducing the spread of flu in schools. We provide recommendations for the 2009-2010 flu season, assuming that severity of illness is similar to what was seen from April through December 2009 during the 2009 H1N1 flu outbreak, as well as recommendations that could be added if the severity of illness worsens. Flu is unpredictable. CDC will continue to monitor the spread of flu, the severity of the illness it is causing, and whether the virus is changing; CDC will provide periodic updates of these assessments. If this information indicates that flu is causing more severe disease than during April through December 2009 of the 2009 H1N1 flu outbreak, or if other developments might require more aggressive mitigation measures, CDC might recommend preemptive, or early, school dismissals.

## Flu Symptoms, Transmission, and Risk:

Symptoms of flu can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue, and sometimes diarrhea and vomiting. People may be infected with the flu, including 2009 H1N1 flu, and have respiratory symptoms without a fever. Like seasonal flu, 2009 H1N1 flu infection in humans can vary in severity from mild to severe. Visit <http://www.cdc.gov/H1N1flu/qa.htm> (<http://www.cdc.gov/H1N1flu/qa.htm>) for more information on flu symptoms.

Like seasonal flu, the 2009 H1N1 flu virus is spread mainly from person to person through coughs or sneezes of infected individuals. People may also become infected by touching something – such as a surface or object – with flu virus on it and then touching their mouth, nose, or eyes.

Some people are at higher risk than others for serious complications from flu.

These people include:

- children younger than 5 years old, but especially children younger than 2 years old
- people aged 65 years or older
- pregnant women
- adults and children who have:
  - asthma
  - neurological and neurodevelopmental conditions
  - chronic lung disease
  - heart disease
  - blood disorders
  - endocrine disorders (such as diabetes)
  - kidney, liver, and metabolic disorders
  - weakened immune systems due to disease or medication
- people younger than 19 years of age who are receiving long-term aspirin therapy

For more information on people at high risk for flu complications, visit <http://www.cdc.gov/h1n1flu/highrisk.htm> (<http://www.cdc.gov/h1n1flu/highrisk.htm>).

## RECOMMENDATIONS FOR SCHOOL (K-12) RESPONSE TO FLU FOR THE 2009–2010 SCHOOL YEAR

The most important things schools can do to reduce the risk of flu is to encourage flu vaccination for all students and those staff who are recommended for vaccination; suggest early treatment for people at higher risk for flu complications; facilitate use of respiratory etiquette and hand hygiene by students and staff; ensure that sick students and adults do not come to the facility; and separate sick and well people as soon as possible. School administrators should frequently remind students, their families, and staff about the importance of these. Educational materials (for example, posters) to enhance compliance with recommendations should be visible in the school setting. Examples of these materials are available at <http://www.cdc.h1n1flu/flyers.htm> (<http://www.cdc.h1n1flu/flyers.htm>) [↗](#) (<http://www.cdc.gov/Other/disclaimer.html>). Furthermore, [Preparing for the Flu: A Communication Toolkit for Schools \(K-12\)](http://www.cdc.gov/h1n1flu/schools/toolkit/) (<http://www.cdc.gov/h1n1flu/schools/toolkit/>) also provides many materials for use.

School administrators should examine and revise, as necessary, their current crisis or pandemic plans and procedures; develop contingency plans to cover key positions when staff are absent from work; update contact information for families and staff; and share their plans with families, staff, and the community. School administrators should review and revise, if necessary, their sick leave policies to remove barriers to staff staying home while sick or to care for a sick family member. A healthcare provider's note should not be required for students or staff to validate their illness or to return to the school setting.

The recommendations that follow are divided into two groups: 1) recommendations to use now, during this academic year, assuming a similar severity to April through December 2009 of the 2009 H1N1 flu outbreak, and 2) recommendations to consider adding if a more severe flu season occurs.

### Recommended strategies to use now, for flu conditions with severity similar to April through December 2009 of the 2009 H1N1 flu outbreak

- **Encourage vaccination against the flu:** The best way to protect against the flu – seasonal and 2009 H1N1 – is to get vaccinated.
  - The five primary target groups for vaccination against 2009 H1N1 flu include pregnant women, people who live with or care for children younger than 6 months of age, healthcare and emergency medical services personnel, people age 6 months through 24 years, and people age 25 through 64 years who have underlying medical conditions that put them at higher risk of complications from flu. Due to increased vaccine availability, everyone, including those over age 65 years, can now be vaccinated.
  - All students and some staff will fall within these groups and should be among the first to receive the 2009 H1N1 flu vaccine. Visit <http://www.cdc.gov/h1n1flu/vaccination> (<http://www.cdc.gov/h1n1flu/vaccination>) for more information.
- **Advise the sick to stay home:** Those with flu-like illness should be asked to stay home for at least 24 hours after they no longer have a fever, or signs of a fever, without the use of fever-reducing medicines. They should stay home even if they are using antiviral medicines. (For more information, visit <http://www.cdc.gov/h1n1flu/guidance/exclusion.htm> (<http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>).
- **Separate sick students and staff:** Students and staff who appear to have flu-like illness should be sent to a room separate from others and asked to go home immediately.

- CDC recommends people with known, probable, or suspected flu or flu-like illness to use a facemask if available and tolerable, or otherwise to cover their noses and mouths with a tissue when coughing or sneezing (or an elbow or shoulder if no tissue is available).
  - For those caring for people with flu-like illness, CDC recommends use of appropriate personal protective equipment. Visit <http://www.cdc.gov/h1n1flu/masks.htm> (<http://www.cdc.gov/h1n1flu/masks.htm>) for information on appropriate personal protective equipment.
- **Discourage attendance at school events by sick people:** Events such as school assemblies and sporting events that bring large groups together may pose a high risk of exposure and transmission of flu.
    - Use a variety of communication methods such as sending a letter home with students or e-mail to discourage those with flu-like illness who may come to watch these events, such as family friends or relatives, from attending these events until they have been free of fever for at least 24 hours.
    - Explore ways to modify events to reduce close contact and increase distances between participants. Schools may need to consider cancelling or postponing some events if modification is not possible and there is a high level of flu activity in the community.
- **Emphasize respiratory etiquette and hand hygiene by both people who are well and those who have any symptoms of flu:** Encourage students and staff to cover their noses and mouths with a tissue when coughing or sneezing (or an elbow or shoulder if no tissue is available) and to wash their hands frequently with soap and water when possible; students and staff should keep hands away from their noses, mouths, and eyes.
    - If soap and water are not available, alcohol-based hand rubs can also be used. However, hand rubs should not be used when hands are visibly soiled.
    - Visit: <http://www.cdc.gov/flu/protect/covercough.htm> (<http://www.cdc.gov/flu/protect/covercough.htm>) for more information on respiratory etiquette and [www.cdc.gov/cleanhands](http://www.cdc.gov/cleanhands) (<http://www.cdc.gov/cleanhands>) for more information on hand hygiene.
  - **Perform routine environmental cleaning:** School staff should routinely clean frequently touched surfaces with the cleaners they typically use.
    - Provide disposable wipes so that commonly used surfaces can be wiped down by students before each use.
    - CDC does not believe any additional disinfection of environmental surfaces beyond the recommended routine cleaning is required.
  - **Promote early treatment of students and staff at higher risk for flu complications:** People at higher risk for flu complications who become sick with flu-like illness should speak with their healthcare provider as soon as possible to determine if they need antiviral treatment.
    - It's very important that antiviral drugs be used early to treat flu in people who are very sick (for example people who are in the hospital) and people who are sick with flu and have a greater chance of getting serious flu complications. Other people may also be treated with antiviral drugs by their doctor this season.
  - **Consider selective school dismissal:** Although there are not many schools where all or most students are at higher risk for flu complications (for example, schools for medically fragile children or for pregnant students), a community might decide to dismiss such a school to better protect these students.

## Recommended strategies to add in the event of increased flu severity compared to April through December 2009 of the 2009 H1N1 flu outbreak

CDC may recommend additional measures to help protect students and staff if global and national assessments indicate that flu is causing more severe disease. In addition, local health and education officials may elect to implement some of these additional measures. Except for school dismissals, these strategies have not been scientifically tested. However, CDC would like communities to have tools to use

that may be the right measures for their community and circumstances. Implementation of these strategies is likely to be more difficult and to have more disruptive effects than the previously described strategies. These strategies should be considered if flu severity increases and are meant for use **in addition to** the strategies outlined above.

- **Conduct active screening for illness:** Schools should check students and staff for fever and other symptoms of flu when they get to school in the morning, separate those who are sick, and ask them to go home as soon as possible. Throughout the day, staff should be vigilant in identifying students and other staff who appear sick.
- **Permit students and staff at higher risk for flu complications to stay home:** People at higher risk for flu complications should talk to their healthcare provider about staying home from school when a lot of flu is circulating in the community. Schools should plan now for ways to continue educating students who stay home through instructional phone calls, homework packets, internet lessons, and other approaches.
- **Increase social distances within the school environment:** CDC encourages schools to try innovative ways of separating students. These can be as simple as moving desks farther apart or cancelling classes that bring together children from different classrooms.
- **Advise students with sick household members stay home:** Students who have a sick household member should stay home for 5 days from the day the first household member got sick. This is the time period they are most likely to get sick themselves.
- **Extend the time that sick people stay home:** If flu severity increases, people with flu-like illness should stay home for at least 7 days, even if they have no more symptoms. If people are still sick, they should stay home until 24 hours after they have no symptoms.
- **Consider school dismissals:** School and health officials should work closely to balance the risks of flu in their community with the disruption dismissals will cause in both education and the wider community and should clearly state the reason for school dismissal.
  - **Reactive dismissals** might be appropriate when schools are not able to maintain normal functioning for example, when a significant number and proportion of students have documented fever while at school despite recommendations to keep sick children home.
  - **Preemptive dismissals** can be used proactively to decrease the spread of flu. CDC may recommend preemptive school dismissals if the flu starts to cause severe disease in a significantly larger proportion of those affected.
  - The length of time schools should be dismissed will vary depending on the reason for dismissal as well as the severity and extent of illness. Schools that dismiss students should do so for 5 to 7 calendar days. Before the end of this period, the community should reassess whether or not to resume classes after that period based on the epidemiology of the disease and the benefits and consequences of keeping students home. Schools that dismiss students should remain open to teachers and staff so they can continue to provide instruction through other means.
  - CDC does not believe any additional disinfection of environmental surfaces beyond routine cleaning is required while a school is closed.
  - For students who are too young to care for themselves, parents should be encouraged to develop alternate care plans in case school closes (for example, individual or small group care by relatives or neighbors or changes to work schedules or locations).
  - Communities should plan to address possible secondary effects of school dismissal. Closing schools could affect: child education; critical infrastructure; parents' job security and income; child nutrition; and child safety.
  - **If school is dismissed, let CDC, the U.S. Department of Education, and your state health and education agencies know by submitting a simple report at [www.cdc.gov/FluSchoolDismissal](http://www.cdc.gov/FluSchoolDismissal) (<http://www.cdc.gov/FluSchoolDismissal>).**

## DECIDING ON A COURSE OF ACTION

CDC recommends a combination of strategies applied early and simultaneously. Communities and states should select strategies a) based on trends in the severity of disease, virus characteristics, feasibility, and acceptability, and b) through collaborative decision-making involving public health and education agencies, school staff, students, students' families, and the wider community. CDC and its partners will continuously look for changes in the severity of flu-like illness and will share what is learned with state

and local agencies. However, states and local communities can expect to see a lot of differences in disease burden across the country.

Every state and community has to balance a variety of objectives to determine their best course of action to help decrease the spread of flu. Decision-makers should explicitly identify and communicate their objectives which might be one or more of the following: (a) protecting overall public health by reducing community transmission; (b) reducing transmission in students and school staff; and (c) protecting people at higher risk for flu complications.

Some strategies can have negative consequences in addition to their potential benefits. In the particular case of school dismissals, decision-makers also must consider and balance additional factors: (a) how to ensure students continue to learn; (2) how to provide an emotionally and physically safe place for students; and (3) how to reduce demands on local healthcare services. The following questions can help begin discussions and lead to decisions at the state and local levels.

## Decision-Makers and Stakeholders

Are all of the right decision-makers and stakeholders involved?

- State and/or local health officials
- State and/or local education officials
- State and/or local homeland security officials
- State and/or local governing officials (e.g., governors, mayors)
- Parent and student representatives
- Representatives of local businesses, the faith community, school-employee unions, and community organizations
- Teachers
- Healthcare providers and hospitals
- School nurses
- School food service directors
- Vendors that supply schools

## Information Collection and Sharing

**Can local or state health officials determine and share information about the following?**

- Outpatient visits for flu-like illness
- Hospitalizations for flu-like illness
- Trends in the numbers of hospitalizations or deaths
- Percent hospitalized patients who require admission to intensive care units (ICU)
- Deaths from flu
- Groups being disproportionately affected
- Ability of local healthcare providers and emergency departments to meet increased demand
- Availability of hospital beds, ICU space, and ventilators for flu patients
- Availability of hospital staff
- Availability of antiviral medicines

**Can local education agencies or schools determine and share information about the following?**

- School absenteeism rates for both students and staff
- Number of visits to school health offices daily
- Number of students with flu-like illness sent home during the school day

## Feasibility

## Do you have the resources to implement the strategies being considered?

- Funds
- Personnel
- Equipment
- Space
- Time
- Legal authority or policy requirements

## Acceptability

### Have you determined how to address the following challenges to implementing the strategies?

- Public concern about flu
- Lack of public support for the intervention
- People who do not feel empowered to protect themselves
- Secondary effects of strategies (for example, dismissing schools could impact child nutrition, job security, financial support, health service access, and educational progress)

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